

ABSTRACT OF THE DISCLOSURE

5 A photovoltaic element, a light shielding portion,
a planarized layer, a color filter, another planarized
layer and an undercoat layer are formed successively on
a semiconductor substrate, followed by forming resin
lenses. The undercoat layer positioned between
adjacent resin lenses is subjected to an etching
treatment with the resin lenses used as a resist mask
so as to form ditches extending in the X- and Y-
10 directions and other ditches extending in the XY-
direction. Further, a transparent resin layer having a
predetermined thickness is formed to cover the resin
lenses and the ditches, thereby obtaining a solid
image-pickup device comprising a micro lens array
15 including a plurality of micro lenses.